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Notice of Allowability	Application No.	Applicant(s)	
	09/598,249	SHIMANUKI ET AL.	
	Examiner	Art Unit	
	Stephen M. D'Agosta	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. ☒ This communication is responsive to amendment received 3-10-2005.
- 2. ☒ The allowed claim(s) is/are 23-30.
- 3. ☒ The drawings filed on 21 June 2000 are accepted by the Examiner.
- 4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 - 1. ☒ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 - 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- 7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance ✓ |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Arguments

The applicant's amendment (and arguments) received 3-10-05 overcome the primary examiner's prior art rejection. **Hence claims 23-20 are allowed.**

Claims 1-16 are cancelled while claims 17-22 were withdrawn.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

1. For claims 23, 25, 27 and 29, the primary examiner is swayed by both the amendment and the applicant's arguments. Therefore he believes the claim to be novel in his opinion. The claims teach a circuit/apparatus as described below:

A temperature compensating circuit/apparatus for compensating an operation of an electronic circuit having a temperature characteristic in accordance with an ambient temperature of the electronic circuit, comprising:

temperature detecting means for detecting the ambient temperature of the electronic circuit; and

temperature compensating control means comprising:

first storage means for storing corrected temperatures each of which corresponds to one of the a plurality of detected ambient temperatures, the detected ambient temperatures being within a temperature range that is to be corrected and that is a detection characteristic of the temperature detecting means, and said corrected temperatures being set at values for correcting detection errors in the detected ambient temperatures;

second storage means for storing an operation correction data prepared for correcting a temperature characteristic of the electronic circuit; and

correction processing means for selectively reading, from the first storage means,

one of the corrected temperatures corresponding to the ambient temperature detected by the temperature detecting means, and for correcting the operation of the electronic circuit on the basis of the corrected temperature and the operation correction data stored in the second storing means corresponding to the corrected temperature.

Fukumura does not teach or suggest "storing corrected temperatures ... " and "storing operation correction data . . ." as well as "first and second storing means" or "correction process means".

Also, "although Fukumura discloses frequency of an oscillation device, it does teach or suggest selectively reading, from the first storage means, one of the corrected temperatures corresponding to the ambient temperature detected by the temperature detecting means" and correcting the operation of the electronic circuit on the basis of the corrected temperature and operation correction data stored in the second storing means corresponding to the corrected temperature" as recited in claim 23.

Fukumura merely describes controlling frequency using time-divided âactional variations in the output of a counter."

Continuing from the applicant's arguments, Taketoshi does not cure Fukumura's deficiencies. Taketoshi describes sensing a temperature of a crystal vibrator with a temperature sensor (Abstract: Constitution). Taketoshi mentions an EEPROM that stores plural kinds of transmission signal patterns and "offset data quantizing a temperature characteristic curve of the crystal vibrator . . . over a prescribed temperamre range" (Abstract: Constitution). Taketoshi does not teach or suggest at least (first storage means for storing corrected temperatures" and "correction processing means," as claimed.

Wojewoda does not cure the deficiencies of Fukumura and Taketoshi. Wojewoda describes a "temperature compensating circuit . . . for a crystal oscillator module" (Abstract).

Wojewoda's describes providing temperature compensating digital data" from a memory to the crystal oscillator module" (col. 2, lines 13-20). According to Wojewoda, the "compensating digital data corresponds to the frequency deviation of the crystal oscillator module . . . over temperature" (col. 3, lines 15-22,. see col. 5, lines 60-64,. see also col. 6, lines 7-12). Wojewoda describes "coupling . . . (temperature-dependent signal (corresponding to an ambient temperature) to the memory such that digital data corresponding to the frequency variation . . . at the ambient temperature is provided" (col. 7, lines 5-15., FIG. 4). This digital data is applied to a signal generator and a compensation signal is provided to a tuning circuit of the oscillator.

Wojewoda does not teach or suggest at least "first storage means for storing corrected temperatures" and correction processing means," as recited in claim 23. For example, providing a compensation signal based on digital data corresponding to a frequency variation at an ambient temperature does not constitute selectively reading, from " . . . first storage means, one of the corrected temperatures corresponding to the ambient temperature detected by the temperature detecting means" and correcting the operation of the electronic circuit on the basis of the corrected temperature and operation correction data stored in Ea) . . . second storing means corresponding to the corrected temperature," as claimed.

These arguments have swayed the examiner and the claims are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
PRIMARY EXAMINER
4-22-2005

